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EXAMINER	
PHAM, MICHAEL	
ART UNIT	**PAPER NUMBER**
2167	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/627,915	YOSHIMURA ET AL.	
	Examiner	Art Unit	
	Michael D. Pham	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-8,11-16 and 19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-8,11-16 and 19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4-6, 16, and 19-20 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki).

Claim 1:

Hattori discloses:

A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgment criteria set in advance [c. 7 l. 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]; **and**

A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria [c. 10 l. 53-55, retrieval result output section outputs final retrieval results.];

Wherein when it is judged that the result of the first retrieval does not satisfy the judgment criteria, the retrieval unit changes the retrieval condition and performs a second retrieval over the network [c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression. Col. 14 l. 32-40, network]; and

When it is judged that a number of one or more services included in the retrieval result has not reached a lower limit number set as the judgment criteria, the retrieval unit changes the retrieval condition so as to be wider and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed [col. 24 lines 30-43, initial value of the retrieval parameter K is 0.5 and minimum value and the maximum value of the retrieval parameter are 0 and 1, respectively, the maximum value of the retrieval parameter is changed from 1 to .5 and the value of the retrieval parameter is changed from 0.5. Hence the retrieval condition is set so as to be wider. E.g. col. 23 lines 32-34, closer K is to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from the database decreases.]

A retrieval unit that sets a retrieval condition according to a request the client and performs a first retrieval over the network based upon the set retrieval condition (retrieval condition) [figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition

previously setup checks if the retrieval expression meets the retrieval result condition. Col. 14 l. 32-40, network]

However Hattori does not explicitly disclose **a service.**

On the other hand, Kalogeraki, abstract, discloses a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included a service based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

Claim 4:

The service retrieval apparatus according to claim 1, wherein, when it is judged that a number of one or more services included in the result of the first retrieval exceeds an upper limit number set as the judgment criteria, the retrieval unit changes the retrieval condition to be narrower to perform the second retrieval[Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

Claim 5:

The service retrieval apparatus according to claim 4, wherein the retrieval unit performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed [Hattori, c. 23 l. 30-39, retrieval parameter k indicates how restrictive the retrieval condition is. As the value of retrieval k becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from database decreases. Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition becomes less restrictive and the number of data items increases.]..

Claim 6:

The service retrieval apparatus according to claim 4, wherein the retrieval unit narrows down a range for which the first retrieval is performed for performing the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

Claim 16:

Hattori discloses:

Judging whether or not a result of the first retrieval satisfies judgment criteria set in advance [c. 7 l. 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]; **and**

Returning the result of the retrieval which is judged to satisfy the judgment criteria [c. 10 l. 53-55, retrieval result output section outputs final retrieval results.];

When it is judged that the result of the retrieval does not satisfy the judgment criteria, changing the retrieval condition to perform a second retrieval over the network [c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression. Col. 14 l. 32-40, over a network];

When it is judged that a number of one or more services included in the result of the retrieval does not reach a lower limit number set as the judgment criteria, changing the retrieval condition to be wider and to perform the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed [col. 24 lines 30-43, initial value of the retrieval parameter K is 0.5 and minimum value and the maximum value of the retrieval parameter are 0 and 1, respectively, the maximum value of the retrieval parameter is changed from 1 to .5 and the value of the retrieval parameter is changed from 0.5. Hence the retrieval condition is set so as to be wider. E.g. col. 23 lines 32-34, closer K is to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from the database decreases.]

setting a retrieval condition in response to a request of the client and performing a first retrieval over the network based upon the retrieval condition (retrieval condition) [figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition.].

However, Hattori does not explicitly disclose **a service.**

On the other hand, Kalogeraki, abstract, discloses a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included **a service** based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

Claim 19:

The service retrieval method according to claim 16 further comprising:

When it is judged that a number of one or more services included in the result of the first retrieval exceeds an upper limit number set as the judgment criteria, changing the retrieval condition to be narrower to perform the second retrieval [Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

Claim 20:

The service retrieval method according to claim 19, wherein a range for which the first interval is performed is narrowed down to perform the second retrieval [Hattori, c. 23 l. 25-

39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

3. **Claims 7, 15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki) and U.S. Patent 6026388 by Liddy et. al. (hereafter Liddy).**

Claim 7:

Hattori and Kagogeraki disclose in Hattori retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 l.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55); however Hattori and Kagogeraki do not explicitly disclose **a reply unit that rearranges the result of the retrieval**. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori and Kagogeraki to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

Claim 15:

A client apparatus which retrieves a service over a network provided by a server connected to the network in response to a service retrieval request and sends the service retrieval request to a service retrieval apparatus providing a retrieval service for returning a result of the retrieval, comprising:

Hattori discloses,

Selection means for selecting one or more attribute items, magnitudes (importance degree) **of which can be compared, from attribute items included in retrieval conditions of the service** [Hattori discloses retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 l.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree; and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55)

];

retrieval result receiving means for receiving a retrieval result from a retrieval apparatus in response to a retrieval request [Hattori, c. 10 l. 53-55, retrieval result output section outputs final retrieval results.]

However Hattori does not explicitly disclose a service. On the other hand, Kalogeraki, abstract, discloses a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included **a service** based on the disclosure of Kalogeraki for the purpose of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

Hattori and Kagogeraki do not explicitly disclose **output means for rearranging a plurality of items of service information included in the retrieval result based upon values of the attribute items selected by said selection means included in each item of service information to output the service information**. On the other hand, Liddy discloses c. 24 l. 24-55, that the matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori and Kagogeraki to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

The combination of Hattori, Kagogeraki, and Liddy disclose "wherein the rearranging is executed when the plurality of items of service information exceeds a number set in advance." Col. 24 lines 54-55, of Liddy suggests the recited limitation "the total number of presented documents can be selected by the user"; hence organizing the documents when a total number of

documents is received by user (rearranging is executed when the plurality of items of items of service information exceeds a number set in advance).

Claim 21:

Hattori and Kagogeraki disclose in Hattori retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 l.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55); however Hattori and Kagogeraki do not explicitly disclose **a reply unit that rearranges the result of the retrieval**. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori and Kagogeraki to have included the step of a reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

4. **Claims 8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki) ,and Background of the Application (hereafter background).**

Claim 8:

A plurality of service retrieval apparatuses which provide a retrieval service for retrieving a service provided by a server connected to a network in response to a request from a client and returning a result of the retrieval, the system comprising:

Hattori discloses:

A retrieval unit that executes a first retrieval over the network for a service according to the set retrieval range (minimum and maximum) **for the request** [figure 1, retrieval management section. Retrieval expression from input keywords, which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition. And c. 22 l. 60-65 and c. 23 l. 25-39, user is able to set a minimum and maximum data count, retrieval expression may be modified. Col. 14 l. 32-40, network];

A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgment criteria set in advance[c. 7 l. 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression.]; **and**

A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria[c. 10 l. 53-55, retrieval result output section outputs final retrieval results.];

Wherein, when it is judged that the result of the retrieval does not satisfy the judgment criteria, the retrieval unit changes the retrieval conditions and performs a second retrieval[c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression].

When it is judged that a number of one or more services included in the result of the retrieval does not reach a lower limit number set as the judgment criteria, the retrieval unit changes the retrieval conditions to be wider and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed [col. 24 lines 30-43, initial value of the retrieval parameter K is 0.5 and minimum value and the maximum value of the retrieval parameter are 0 and 1, respectively, the maximum value of the retrieval parameter is changed from 1 to .5 and the value of the retrieval parameter is changed from 0.5. Hence the retrieval condition is set so as to be wider. E.g. col. 23 lines 32-34, closer K is to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from the database decreases.]

However Hattori does not explicitly disclose a service.

On the other hand, Kalogeraki discloses, abstract, a service search network system.

Both Hattori and Kalogeraki are directed to a system for searching and receiving. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori to have included a service based on the disclosure of Kalogeraki for the purpose

of providing more relevant search results. Kalogeraki improves upon Hattori by providing another search result including relevant services.

Hattori and Kalogeraki disclose a **service information database** (service repositories) **that stores service information including address information** (service network address) **and installation position information of the server** (how the service can be contacted)**and attribute information of a service provided by the server** (meta-data) [Kalogeraki, 0035, service repositories. 0037, the metadata must include such information as what interactions the service is capable of and how the service can be contacted];

The modification of Hattori and Kalogeraki disclose a network system (figure 2 element 20). However, Hattori and Kalogeraki do not explicitly disclose sub-network[1]. On the other hand, the background discloses sub-networks. On the other hand, the background discloses page 1, sub-networks.

It would have been obvious to have modified Hattori and Kalogeraki to have included sub-networks, based on the disclosure of the background. One of ordinary skill at the time the invention was made would have been motivated to provide a sub-network for the purpose of providing a more information from different systems in retrieval systems.

The modification of Hattori, Kalogeraki, and the background discloses

A service retrieval apparatus database (Kalogeraki, 0035, service repository) **that, when the network is divided into a plurality of sub-networks** (background, 0004 sub-network), **stores address information and installation position information of a service retrieval apparatus with each sub-network** (Kalogeraki, 0035, stores descriptive information) **included in a retrieval range** (background, pg. 4 l. 11-20, retrieval range);

A retrieval range setting unit that (background, pg. 4 l. 11-20, set retrieval range), **by retrieving the service retrieval apparatus database** (background 4 l. 11-20, service retrieval using a range to be a target of retrieval in the network is set, disclosed service information is retrieved in the set retrieval range.) **based upon inputted retrieval conditions specifies one or more service retrieval apparatuses conforming to the retrieval conditions specifies one or more service retrieval apparatuses conforming to the retrieval conditions** (Kalogeraki, abstract, formats the service search request into a format recognized by the file search nodes such that the service request can be propagated to the second service search node via some of the file search nodes.) **and sets sub-networks** (background, 0004, sub-networks), **which correspond to the specified service retrieval apparatuses, as a retrieval range for the request** (background pg. 4 l. 11-20, set retrieval range).

Claim 11:

The service retrieval apparatuses according to claim 8, wherein, when it is judged that a number of one or more services included in the result of the first retrieval exceeds an upper

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[1] Subnetworks are obvious when dealing with internet. One of ordinary skill in the art would know that the

limit number set as the judgment criteria, the retrieval unit changes the retrieval conditions to be narrower to perform the second retrieval[Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.].

Claim 12:

The service retrieval apparatuses according to claim 11, wherein the retrieval unit performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed[Hattori, c. 23 l. 30-39, retrieval parameter k indicates how restrictive the retrieval condition is. As the value of retrieval k becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from database decreases. Conversely, as the value of the retrieval parameter k becomes closer to 0 the retrieval condition becomes less restrictive and the number of data items increases.].

Claim 13:

The service retrieval apparatuses according to claim 12, wherein the retrieval unit narrows down a range for which the first retrieval is performed to perform the second retrieval[Hattori, c. 23 l. 25-39, if the estimated number of retrieval count does not fall between the specific minimum retrieval (lower limit) count and the specified maximum retrieval count (upper limit) the retrieval expression is modified repeatedly until the condition is satisfied.]..

Internet comprises connected computer networks, which fits the definition of a sub-network (e.g. a

5. **Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5761496 by Hattori (hereafter Hattori) further in view of U.S. Patent Application Publication 2003/0204497 by Kalogeraki et. al. (hereafter Kalogeraki) , Background of the Application (hereafter background), and U.S. Patent 6026388 by Liddy et. al. (hereafter Liddy).**

Claim 14:

The service retrieval apparatuses according to claim 8, further comprising a reply unit that rearranges the result of the retrieval based upon values with respect to attribute items included in the retrieval conditions, and then returns the result of the retrieval to said client.

Hattori, Kagogeraki, and the background disclose in Hattori retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 l.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and it's importance degree and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55); however Hattori, Kagogeraki, and the background do not explicitly disclose **a reply unit that rearranges the result of the retrieval**. On the other hand, Liddy discloses matching of documents to a query organizes documents by matching scores in a ranked list. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hattori, Kagogeraki, and the background to have included the step of a

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network that is part of another larger network).

reply unit that rearranges the result of the retrieval based on the disclosure of Liddy. One of ordinary skill in the art at the time the invention was made would have been motivated to do so for the purpose of displaying the most relevant results first.

Response to Arguments

6. Applicant's arguments filed 1/16/07 have been fully considered but they are not persuasive. Applicant's have asserted the following (lettered).

A. That Hattori fails to disclose or suggest that the retrieval unit changes the retrieval condition so as to be wider when it is judged that a number of one or more services included in the retrieval result has not reached a lower limit number set as the judgement criteria, and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed, as now recited in claims 1, 8, and 16. The reasons applicant provides are because in Hattori(col. 24 lines 44-54) suggests that the value of the retrieval parameter K is changed from .5 to the larger parameter value of .75. Therefore Hattori teaches that the range designated by parameter K changes by INCREASING from 0-0.5 to 0-.75 (e.g. "the number of data items retrieved from the database INCREASES.). That accordingly, the range of 0-0.5, used in the first retrieval process is again used in the second retrieval process, which uses the range 0-.75. Therefore Hattori does not disclose or suggest the retrieval unit changes the retrieval condition so as to be wider when it is judged that a number of one or more services included in the retrieval result has not reached a lower limit number set as the judgement criteria

and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed.

In response, the examiner respectfully disagrees with applicants that Hattori fails to disclose "when it is judged that a number of one or more services included in the retrieval result has not reached a lower limit number set as the judgment criteria the retrieval unit changes the retrieval condition so as to be wider and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed. Hattori discloses col. 23 lines 32-34, that as the value of retrieved parameter K becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from the database DECREASES:. Hence applicant's statement page 9 lines 16-17, "the number of data items retrieved from database increases" is unpersuasive. Secondly, Applicant's suggested lines show the converse situation. The situation provided suggests applicant's claimed invention. Col. 24 lines 28-43,

> *If the estimated retrieval count is less than the minimum retrieval count in step 2560, the value of the retrieval parameter K is assigned to the maximum value, and the medium between the minimum value of the retrieval parameter and the value of the retrieval parameter K is assigned to the retrieval parameter K (step 2580). For example, if the initial value of the retrieval parameter K is 0.5 and the minimum value and the maximum value of the retrieval parameter are 0 and 1, respectively, the maximum value of the retrieval parameter is changed from 1 to 0.5 and the value of the retrieval parameter K is changed from 0.5 to 0.25.*

That is,, the value of the retrieval parameter K is changed from 1-0.5 to 0.5-.25. Thus Hattori discloses that the range designated by parameter K decreases (i.e. the number of data items retrieved from the database Increases in this situation.)

*Applicant's claim states that the purpose is to change the retrieval condition so as to be WIDER. Applicant's assert that "**excluding a range for the first retrieval was performed**" is not disclosed. As disclosed above, as K comes closer to 1 it is more restrictive, hence the number of data items retrieved from database decreases. In col. 24 lines 28-43 it discloses that once K has reached a lower limit (e.g. too little of results returned) Then accordingly, the range such as 1-0.5 used in the retrieval process is excluded in the second retrieval process, which uses the range 0.5-.25. Therefore Hattori suggests the retrieval unit changes the retrieval condition so as to be wider when it is judged that a number of one or more services included in the retrieval result has not reached a lower limit number set as the judgement criteria, and performes the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed, as recited in claims 1, 8, and 16.*

B. That as to claims 7, 15, and 21 That Liddy merely discloses matching documents to a query that organizes documents based on scores in a ranked list (abstract; col. 2 lines 61-67).

In response, claim 15 recites a new limitation "wherein rearranging is executed when the plurality of items of service information exceeds a number set in advance." However, Col. 24 lines 54-55, of Liddy where it states "the total number of presented documents can be selected by the user" suggests the recited limitation. That is to say, Liddy essentially suggests organizing the documents when a total number of documents to be presented is received by user (ergo. rearranging is executed when the plurality of items of items of service information exceeds a number set in advance).

As to claims 7 and 21. Claims 7 and 21 are still broad enough to read on the combination of the cited references. Where "rearranging a retrieval result" and "a reply unit that rearranges the results of the retrieval". Liddy discloses c. 24 l. 53-60, that matching documents to a query organizes documents by matching scores in a ranked list. Where the total number of presented documents can be selected by the user. Therefore, suggesting the claimed "rearranging (organizes) the results of the retrieval (documents)". Therefore, claims 7 and 21 are anticipated by the cited combinations.

Conclusion

7. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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